



## Secretary's Environmental Assessment Requirements for the EIS

Sec	creta	ry's Environmental Assessment Requirements	<b>Relevant EIS Section</b>
Ge	nera	Requirements	
Scł Rej	nedul gulat	ironmental impact statement (EIS) must comply with the requirements of e 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the EP&A ion). cular, the EIS must include:	
•		and-alone executive summary;	Executive summary
•		Ill description of the development, including:	Section 3.0
	0	details of construction, operation and decommissioning, including any proposed staging of the development or refurbishing of turbines over time;	Section 3.0
	0	all infrastructure and facilities, such as substations, transmission lines, construction compounds, concrete batching plants, internal access roads, and road upgrades (including any infrastructure that would be required for the development, but the subject of a separate approvals process);	Section 3.0
	0	plans for any buildings;	Section 3.0
	0	site plans and maps at an adequate scale with dimensions showing:	
		<ul> <li>the location and dimensions of all project components including coordinates in latitude / longitude and maximum AHD heights of the turbines;</li> </ul>	Section 3.0
		<ul> <li>existing infrastructure, land use, and environmental features in the vicinity of the development, including nearby residences and approved residential developments or subdivisions within 5 km of a proposed turbine, and any other existing, approved or proposed wind farms in the region; and</li> <li>the development corridor that has been assessed, including any allowance for micro-siting of turbines and identification of the key environmental constraints that have been considered in the design of the development;</li> </ul>	
	0	consolidated list and GIS data of coordinates of wind turbines, project infrastructure and relevant receivers and distances to potentially impacted receivers;	Section 3.0
	0	details of the progressive rehabilitation of the site;	Section 3.0
•		st of any approvals that must be obtained before the development may nmence;	Section 4.0
•		terms of any proposed voluntary planning agreement with the relevant local ncil;	Section 2.0
•		assessment of the likely impacts of the development on the environment, using on the specific issues identified below, including:	Section 6.0
	0	a description of the existing environment likely to be affected by the development using sufficient baseline data;	Section2.0
	0	an assessment of the likely impacts of all stages of the development (including the cumulative impacts of the development with existing and proposed developments in the New England region, including the Thunderbolt Energy Hub more broadly, New England Solar Farm and the proposed Salisbury Solar Farm and Winterbourne Wind Farm), taking into consideration any relevant State and Commonwealth legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice and including the <i>NSW Wind</i> <i>Energy Guideline for State Significant Wind Energy Development</i> (2016);	Section 2.0 and 6.0



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<ul> <li>a description of the measures that would be implemented to avoid, mitigate and/or offset residual impacts of the development and the likely effectiveness of these measures, including details of consultation with any affected non- associated landowners in relation to the development of mitigation measures, and any negotiated agreements with these landowners; and</li> </ul>	Section 6.0
<ul> <li>a description of the measures that would be implemented to monitor and report on the environmental performance of the development, including adaptive management strategies and contingency measures to address residual impacts;</li> </ul>	Section 6.0
<ul> <li>a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and</li> </ul>	Appendix 5
the reasons why the development should be approved having regard to:	
<ul> <li>relevant matters for consideration under the Environmental Planning and Assessment Act 1979 (EP&amp;A Act), including the objects of the Act, and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development;</li> </ul>	Section 4.0
<ul> <li>an evaluation of the merits of the project as a whole, having regard to the requirements in Section 4.15 of the EP&amp;A Act;</li> </ul>	Section 4.0
<ul> <li>the environmental, economic and social costs and benefits of the development, having regard to the predicted electricity demand in NSW and the National Electricity Market, NSW's Climate Change Policy Framework, NSW's Net Zero Plan Stage 1: 2020 - 2030 and the greenhouse gas savings of the development;</li> </ul>	Section 2.0
<ul> <li>a detailed consideration of the capability of the project to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions and the Department's guidance on the matter;</li> </ul>	Section 2.0
<ul> <li>the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses, including rural villages, rural dwellings, subdivisions, land of high scenic value, conservation areas (including National Parks, State Parks and Reserves), strategic agricultural land, state forests, mineral and coal resources, triangulation stations, tourism facilities, existing or proposed wind farms, and the capacity of the existing electricity transmission network to accommodate the development; and</li> </ul>	Section 2.0
<ul> <li>feasible alternatives to the development (and its key components), including the consequences of not carrying out the development.</li> </ul>	Section 3.3
<ul> <li>The EIS must also be accompanied by a report from a suitably qualified person providing:</li> <li>a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; and</li> <li>certification that the information provided is accurate at the date of preparation.</li> </ul>	Noted
The development application must be accompanied by the consent in writing of the owner/s of the land (as required in clause 49(1)(b) of the Regulation).	Noted
Key Issues	
The EIS must address the following specific issues for the wind farm and associated infrastructure:	
Landscape and Visual – the EIS must include a detailed assessment of the visual impacts of all components of the project (including turbines, transmission lines, substations, and any other ancillary infrastructure and (if required) night lighting) in accordance with the NSW Wind Energy: Visual Assessment Bulletin (DPE, 2016), including detailed consideration of potential visual impacts on local residences.	Section 6.2 Appendix 8
Noise and Vibration – the EIS must:	Section 6.3



Sec	retary's Environmental Assessment Requirements	Relevant EIS Section
•	assess wind turbine noise in accordance with the NSW Wind Energy: Noise Assessment Bulletin (EPA/DPE, 2016);	Appendix 10
•	assess noise generated by ancillary infrastructure in accordance with the NSW Noise Policy for Industry (EPA, 2017);	
•	assess construction noise under the Interim Construction Noise Guideline (DECC, 2009); and	
•	assess traffic noise under the NSW Road Noise Policy (DECCW, 2011); and	
•	assess vibration under the Assessing Vibration: A Technical Guideline (DECC, 2006).	
Bio	diversity – the EIS must:	Section 6.4
•	assess biodiversity values and the likely biodiversity impacts of the development, including impacts associated with transport route road upgrades, in accordance with the Biodiversity Conservation Act 2016 (NSW) (BC Act), including a detailed description of the proposed regime for minimising, managing and reporting on the biodiversity impacts of the development over time, and a strategy to offset any residual impacts of the development in accordance with the BC Act;	Appendix 12
•	assess the impact of the project on birds and bats from blade strikes, low air pressure zones at the blade tips (barotrauma), and alteration to movement patterns resulting from the turbines and considering cumulative effects of other wind farms in the vicinity;	
•	an assessment of the likely impacts on listed aquatic threatened species, populations or ecological communities and a description of the measures to minimise and rehabilitate impacts.	
Tra	ffic and Transport – the EIS must:	Section 6.5
•	assess the construction, operational and decommissioning traffic impacts of the development on the local and State road network (including New England Highway, Kentucky Road, Noalimba Avenue, Oxley Highway, Wollun Woolbrook Road, Old Wollun Road, Traceys Road, Reeves Road, Westvale road, Gunnalong road, Pine Creek road, Walcha Stock Route Road, Borgers Road Rimbanda road and any other roads proposed to be used);	Appendix 13
•	provide details of the peak and average traffic volumes (including light, heavy and over-mass / over-dimensional vehicles) and transport and haulage routes during construction, operation and decommissioning, including traffic associated with sourcing raw materials (water, sand and gravel);	
•	assess the potential traffic impacts of the project on road network function including intersection performance, site access arrangements, site access and haulage routes, and road safety, including school bus routes and school zones;	
•	assess the capacity of the existing road network to accommodate the type and volume of traffic generated by the project (including over-mass / over-dimensional traffic haulage routes from port) during construction, operation and decommissioning;	
•	an assessment of the likely transport impacts to the site access and haulage routes, site access point, any rail safety issues, any Crown Land, particularly in relation to the capacity and conditions of the roads and use of rail level crossings (and rail safety assessment if required), and impacts to rail underbridges and overbridges; and	
•	provide details of measures to mitigate and / or manage potential impacts including a schedule of all required road upgrades (including resulting from over mass / over dimensional traffic haulage routes), road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road and / or rail authority.	



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Haz	ards and Risks – the EIS must include an assessment of the following:	
•	<ul> <li>Aviation Safety:</li> <li>assess the impact of the development under the National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft;</li> </ul>	Section 6.8.1 Appendix 16
	<ul> <li>provide associated height and co-ordinates for each turbine assessed;</li> <li>assess potential impacts on aviation safety, including cumulative effects of wind farms in the vicinity, potential wake / turbulence issues, the need for aviation hazard lighting, considering, defined air traffic routes, aircraft operating heights, approach / departure procedures, radar interference, communication systems, navigation aids;</li> </ul>	
	<ul> <li>identify aerodromes within 30 km of the turbines and consider the impact to nearby aerodromes and aircraft landing areas;</li> <li>address impacts on obstacle limitation surfaces; and</li> <li>assess the impact of the turbines on the safe and efficient aerial application of agricultural fertilisers and pesticides in the vicinity of the turbines and transmission line;</li> </ul>	
•	Telecommunications – identify possible effects on telecommunications systems, assess impacts and mitigation measures including undertaking a detailed assessment to examine the potential impacts as well as analysis and agreement on the implementation of suitable options to avoid potential disruptions to radio communication services, which may include the installation and maintenance of alternative sites;	Section 6.8.2 Appendix 17
•	Health – consider and document any health issues having regard to the latest advice of the National Health and Medical Research Council, and identify potential hazards and risks associated with electric and magnetic fields (EMF) and demonstrate the application of the principles of prudent avoidance;	Section 6.8.3 Appendix 17
•	Bushfire – identify potential hazards and risks associated with bushfires / use of bushfire prone land, including the risks that a wind farm would cause bush fire and any potential impacts on the aerial fighting of bushfires and demonstrate compliance with Planning for Bush Fire Protection 2019; and	Section 6.8.4
•	Blade Throw – assess blade throw risks.	Section 6.8.5 Appendix 18
Her •	itage – the EIS must: assess the impact to Aboriginal cultural heritage items (archaeological and cultural) in accordance with the <i>Guide to Investigating, Assessing and Reporting on Aboriginal</i> <i>Cultural Heritage in NSW</i> (OEH, 2011) and the <i>Code of Practice for the Archaeological</i> <i>Investigation of Aboriginal Objects in NSW</i> (DECCW, 2010);	Section 6.6 Appendix 14
•	provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing options and selecting options and mitigation measures (including the final proposed measures), having regard to the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (DECCW, 2010); and	Section 6.6 Appendix 14
•	assess the impact to historic heritage having regard to the NSW Heritage Manual.	Section 6.7 Appendix 15
Wa •	ter and Soils – the EIS must: quantify water demand, identify water sources (surface and groundwater), including any licensing requirements, and determine whether an adequate and secure water supply is available for the development; assess potential impacts on the quantity and quality of surface and groundwater resources, including impacts on other water users and watercourses, including Namoi, Gwydir and Mcleay catchment areas, Pine Creek, Carlisles Gully, Spring Creek, Looanga Creek, Kentucky Creek, which traverse the site.	Section 6.9



Secretary's Environmental Assessment Requirements	Relevant EIS Section
<ul> <li>where the project involves works within 40 metres of the high bank of any river, la or wetlands (collectively waterfront land), identify likely impacts to the waterfront land, and how the activities are to be designed and implemented in accordance with the DPI <i>Guidelines for Controlled Activities on Waterfront Land</i> (2018) and (if necessary) <i>Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings</i> (DPI 2003); and <i>Policy &amp; Guidelines for Fish Habitat Conservation &amp; Management</i> (DPI, 2013); and</li> <li>describe the measures to minimise surface and groundwater impacts, including ho works on steep gradient land or erodible soil types would be managed and any contingency requirements to address residual impacts.</li> </ul>	ke th w
Waste – the EIS must identify, quantify and classify the likely waste streams to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Section 6.10
Social & Economic – the EIS must include an assessment of the social and economic impacts and benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services.	Section 6.12 Appendix 7.0 Appendix 19
Plans and Documents	
The EIS must include all relevant plans, diagrams and relevant documentation required Documents under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include high quality files of maps and figures of the subject site proposal and proposed road upgrades.	
Consultation	
During the preparation of the EIS, you must:	Section 5.0
<ul> <li>consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, affected landowners, exploration licence holders, quarry operators and mineral title holders.</li> </ul>	
<ul> <li>establish a Community Consultative Committee for the project in accordance with the Community Consultative Committee Guidelines for State Significant Projects, a consult with the committee during the preparation of the EIS, and</li> </ul>	nd
<ul> <li>carry out detailed consultation with the following:</li> </ul>	
• Tamworth Regional Council;	
• Uralla Shire Council;	
• Walcha Shire Council;	
<ul> <li>DPIE's Biodiversity, Conservation and Science Directorate;</li> <li>Department of Provision and Cohinet. Unrited.</li> </ul>	
<ul> <li>Department of Premier and Cabinet - Heritage</li> <li>DBIE Water Crown:</li> </ul>	
<ul> <li>DPIE Water Group;</li> <li>Water NSW:</li> </ul>	
<ul> <li>WaterNSW;</li> <li>Environment Protection Authority;</li> </ul>	
<ul> <li>Environment Protection Authority;</li> <li>Crown Lands;</li> </ul>	
<ul> <li>Regional NSW – Mining, Exploration &amp; Geoscience (MEG);</li> </ul>	
<ul> <li>Department of Primary Industries – Agriculture and Fisheries divisions;</li> </ul>	
<ul> <li>Department of Primary Industries – Agriculture and Fisheries divisions;</li> <li>John Holland Rail;</li> </ul>	
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<ul> <li>NSW Rural Fire Service;</li> </ul>	
<ul> <li>Commonwealth Department of Defence;</li> </ul>	
<ul> <li>Civil Aviation Safety Authority; and</li> </ul>	
• Airservices Australia.	
The EIS must include a description of what consultation was carried out during the preparation of the EIS, identify the issues raised during this consultation, and explain how	
these issues have been addressed in the EIS.	
Commonwealth DAWE Environmental Assessment Requirements	
On 28 October 2021, a delegate of the Federal Minister for the Environment determined that the Thunderbolt Wind Farm Project was a controlled action under section 75 of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). The EPBC Act controlling provisions for the proposed actions are: i. listed threatened species and communities (sections 18 and 18A); and	Noted
ii. listed migratory species (sections 20 and 20A).	
The proposed action will be assessed in accordance with the bilateral assessment	Noted
agreement Amending Agreement No. 1, and as such, is required to be assessed in the manner specified in Schedule 1 to that Agreement, including, addressing the matters outlined in Schedule 4 of the Environment Protection and Biodiversity Conservation Regulations 2000 (EPBC Regulations).	
The proponent must undertake an assessment of all protected matters that may be impacted by the development under the controlling provision identified in paragraph 1. The Commonwealth Department of Agriculture, Water and the Environment considers that the proposed action is likely to have a significant impact on threatened species and communities listed in Appendix A of the SEARs, including:	Section 6.4.4.5 Appendix 12
<ul> <li>Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) (Phascolarctos cinereus) listed as vulnerable.</li> </ul>	
<ul> <li>Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) (Dasyurus maculatus maculatus) listed as endangered.</li> </ul>	
<ul> <li>White-throated Needletail (Hirundapus caudacutus) listed as vulnerable and migratory.</li> </ul>	
• White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box Gum Grassy Woodland) listed as critically endangered.	
Additionally, there is some risk that there may be significant impacts on the following matters and levels of impact should be further investigated:	
Border-tailed Gecko (Uvidicolus sphyrurus) listed as vulnerable.	
<ul> <li>McKie's Stringybark (Eucalyptus mckieana) listed as vulnerable.</li> </ul>	
Bluegrass (Dichanthium setosum) listed as vulnerable.	
Note: uncertainty around the extent and number of protected matters that may be impacted will need to be resolved through the assessment process once final alignment and construction plans have been completed.	
Note: this may not be a complete list and it is the responsibility of the proponent to ensure any protected matters under these controlling provisions are assessed for the Commonwealth decision-maker's consideration.	
The proponent must consider each of the protected matters under the triggered	Section 6.4.4.5
controlling provisions that may be impacted by the action. Note that this may not be a complete list and it is the responsibility of the proponent to undertake an analysis of the significance of the relevant impacts and ensure that all protected matters that are likely to be significantly impacted are assessed for the Commonwealth Minister's consideration.	Appendix 12



Secretary's Environmental Assessment Requirements	<b>Relevant EIS Section</b>
The Environmental Impact Statement (EIS) must address all matters outlined in Schedule 4 of the EPBC Regulations and all the matters outlined below in relation to the controlling provisions.	Section 4.0
The title of the action, background to the action and the current status.	Sections 1.0 and 3.0
The precise location and description of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on Matters of National Environmental Significance (MNES).	Section 3.0
How the action relates to any other actions that have been, or are being taken in the region affected by the action.	Section 2.0 and 6.0
The EIS must include an assessment of the relevant impacts of the action on the matters protected by the controlling provisions, including:	Section 6.4 and Appendix 12
<ul> <li>a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts;</li> </ul>	
<ul> <li>a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;</li> </ul>	
<ul> <li>analysis of the significance of the relevant impacts; and</li> </ul>	
<ul> <li>any technical data and other information used or needed to make a detailed assessment of the relevant impacts.</li> </ul>	
For each of the relevant matters protected that are likely to be significantly impacted by the action, the EIS must provide information on proposed avoidance and mitigation measures to manage the relevant impacts of the action, including:	Section 6.4.4.5 Appendix 5 Appendix 12
<ul> <li>a description and an assessment of the expected or predicted effectiveness of the mitigation measures;</li> </ul>	
<ul> <li>any statutory policy basis for the mitigation measures;</li> </ul>	
<ul> <li>the cost of the mitigation measures;</li> </ul>	
<ul> <li>an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;</li> </ul>	
<ul> <li>the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.</li> </ul>	
Where a significant residual adverse impact to a relevant protected matter is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy.	
For each of the relevant matters likely to be impacted by the action the EIS must provide reference to, and consideration of, relevant Commonwealth guidelines and policy statements including any	Appendix 12
<ul> <li>conservation advice or recovery plan for the species of community;</li> </ul>	
<ul> <li>relevant threat abatement plan for the species;</li> </ul>	
<ul> <li>wildlife conservation plan for the species; and</li> </ul>	
any strategic assessment.	
The EIS must identify each EPBC Act listed threatened species and community likely to be impacted by the action. For any species and communities that are likely to be impacted, the proponent must provide a description of the nature, quantum and consequences of the impacts. For species and communities potentially located in the project area or in the vicinity that are not likely to be impacted, provide evidence why they are not likely to be impacted.	Section 6.4.4.5 Appendix 12



Secretary's Environmental Assessment Requirements	Relevant EIS Section
For each of the EPBC Act listed threatened species and communities likely to be impacted by the action the EIS must provide a separate:	Appendix 12
<ul> <li>description of the habitat (including identification and mapping of suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advice, conservation advice and recovery plans;</li> </ul>	
<ul> <li>details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Australian Government guidelines and policy statements;</li> </ul>	
<ul> <li>description of the relevant impacts of the action having regard to the full national extent of the species or community's range; and</li> </ul>	
• description of the specific proposed avoidance and mitigation measures to deal with relevant impacts of the action;	
<ul> <li>identification of significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account;</li> </ul>	
• description of any offsets proposed to address residual adverse significant impacts and how these offsets will be established.	
• details of how the current published NSW Biodiversity Assessment Methodology has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts; and	
<ul> <li>details of the offset package to compensate for significant residual impacts including details of the credit profiles required to offset the action in accordance with the NSW Biodiversity Assessment Methodology and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites;</li> </ul>	
Note: For the purposes of approval under the EPBC Act, it is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action and deliver an overall conservation outcome that improves or maintains the viability of the MNES i.e 'like for like'. Like-for like includes protection of native vegetation that is the same ecological community or habitat being impacted (preferably in the same region where the impact occurs), or funding to provide a direct benefit to the matter being impacted e.g. threat abatement, breeding and propagation programs or other relevant conservation measures.	
Any significant residual impacts not addressed by the NSW Biodiversity Assessment Methodology may need to be addressed in accordance with the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offset Policy. http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets- policy .	Noted, refer to Section 6.4 and Appendix 12
Information in relation to any other approvals of conditions required must include the information prescribed in Schedule 4 Clause 5 (a) (b) (c) and (d) of the EPBC Regulations 2000.	Section 4.0
Information in relation to the environmental record of a person proposing to take action must include details as prescribed in Schedule 4 Clause 6 of the EPBC Regulations 2000.	Section 4.0
For information given in the EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested, and what uncertainties (if any) are in the information.	Section 8.0